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     (FILE 'HOME' ENTERED AT 09:18:50 ON 14 MAY 2007)

     FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, JAPIO' ENTERED AT 09:19:09 ON 14
     MAY 2007
L1            23 S (CELL LYSTATE)
L2            12 S L1 AND ANTIBOD?
L3             9 DUPLICATE REMOVE L2 (3 DUPLICATES REMOVED)

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L1            23 S (CELL LYSTATE)
L2            12 S L1 AND ANTIBOD?
L3             9 DUPLICATE REMOVE L2 (3 DUPLICATES REMOVED)

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ANSWER 8 OF 9 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
DUPLICATE 2
AN 1991:182809 BIOSIS
DN PREV199191097558; BA91:97558
TI GTPASE-ACTIVATING PROTEIN INTERACTIONS WITH THE VIRAL AND CELLULAR SRC KINASES.
AU BROTT B K [Reprint author]; DECKER S; SHAFER J; GIBBS J B; JOVE R
CS DEP MICROBIOL AND IMMUNOL, UNIV MICH MED SCH, ANN ARBOR, MICH 48109, USA
SO Proceedings of the National Academy of Sciences of the United States of America, (1991) Vol. 88, No. 3, pp. 755-759.
CODEN: PNASA6. ISSN: 0027-8424.
DT Article
FS BA
LA ENGLISH
ED Entered STN: 19 Apr 1991
Last Updated on STN: 14 Jun 1991
AB GTPase-activating protein (GAP), which regulates the activities of Ras proteins, is implicated in mitogenic signal transduction by growth-factor receptors and oncoproteins with tyrosine kinase activity. Oncogenic viral Src (p60v-src) encoded in Rous sarcoma virus possesses elevated tyrosine kinase activity compared with its nononcogenic normal homolog, cellular Src (p60c-src). To examine molecular interactions between GAP and the two Src kinases, immunoprecipitates of Src or GAP prepared from cell lystates were resolved by gel electrophoresis and analyzed by an immunoblot procedure with antibodies to GAP or Src used as probes. Results suggest that p60c-src is associated with a complex containing GAP in immunoprecipitates from lysates of normal rat and chicken cells. However, GAP is not phosphorylated in p60c-src immunoprecipitates subjected to in vitro kinase reactions. By contrast, GAP undergoes tyrosyl phosphorylation in vitro when immunoprecipitates of p60v-src prepared from transformed cell lysates are incubated with ATP. Our findings suggest that p60v-src and p60c-src associate with complexes containing GAP and provide a biochemical link between both kinases and GAP/Ras signal transduction pathways. These results are consistent with the hypothesis that GAP has a role in mediating normal functions of p60c-src as well as oncogenic activities of p60v-src.
CC Cytology - Animal 02506
Genetics - Animal 03506
Biochemistry methods - Nucleic acids, purines and pyrimidines 10052
Biochemistry methods - Proteins, peptides and amino acids 10054
Biochemistry studies - Nucleic acids, purines and pyrimidines 10062
Biochemistry studies - Proteins, peptides and amino acids 10064
Replication, transcription, translation 10300
Biophysics - Membrane phenomena 10508
Enzymes - Chemical and physical 10806
Enzymes - Physiological studies 10808
Metabolism - Proteins, peptides and amino acids 13012
Metabolism - Nucleic acids, purines and pyrimidines 13014
Endocrine - General 17002
Neoplasms - Neoplastic cell lines 24005
Neoplasms - Biochemistry 24006
Neoplasms - Carcinogens and carcinogenesis 24007
Development and Embryology - Morphogenesis 25508
Genetics of bacteria and viruses 31500
Tissue culture, apparatus, methods and media 32500
In vitro cellular and subcellular studies 32600
Virology - Animal host viruses 33506
Medical and clinical microbiology - Virology 36006
IT Major Concepts
Biochemistry and Molecular Biophysics; Cell Biology; Development; Enzymology (Biochemistry and Molecular Biophysics); Genetics; Infection; Metabolism; Microbiology; Molecular Genetics (Biochemistry and Molecular Biophysics); Tumor Biology
IT Miscellaneous Descriptors

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IT Miscellaneous Descriptors

RAT CELLS CHICKEN CELLS ROUS SARCOMA VIRUS ONCORNAVIRUS ONCOPROTEINS ONCOGENES MITOGENIC SIGNAL TRANSDUCTION RAS PROTEINS TYROSINE KINASE TYROSINE PHOSPHORYLATION GROWTH FACTOR RECEPTORS

ORGN Classifier
Retroviridae 03305
Super Taxa
DNA and RNA Reverse Transcribing Viruses; Viruses; Microorganisms
Taxa Notes
DNA and RNA Reverse Transcribing Viruses, Microorganisms, Viruses

ORGN Classifier
Galliformes 85536
Super Taxa
Aves; Vertebrata; Chordata; Animalia
Taxa Notes
Animals, Birds, Chordates, Nonhuman Vertebrates, Vertebrates

ORGN Classifier
Muridae 86375
Super Taxa
Rodentia; Mammalia; Vertebrata; Chordata; Animalia
Taxa Notes
Animals, Chordates, Mammals, Nonhuman Vertebrates, Nonhuman Mammals, Rodents, Vertebrates

RN 9059-32-9 (GTPASE)
141349-89-5D (SRC KINASES)
80449-02-1 (TYROSINE KINASE)
60-18-4Q (TYROSINE)
556-03-6Q (TYROSINE)
87588-23-6D (SRC KINASES)

RAT CELLS CHICKEN CELLS ROUS SARCOMA VIRUS ONCORNAVIRUS ONCOPROTEINS ONCOGENES MITOGENIC SIGNAL TRANSDUCTION RAS PROTEINS TYROSINE KINASE TYROSINE PHOSPHORYLATION GROWTH FACTOR RECEPTORS

ORGN Classifier
Retroviridae 03305
Super Taxa
DNA and RNA Reverse Transcribing Viruses; Viruses; Microorganisms
Taxa Notes
DNA and RNA Reverse Transcribing Viruses, Microorganisms, Viruses

ORGN Classifier
Galliformes 85536
Super Taxa
Aves; Vertebrata; Chordata; Animalia
Taxa Notes
Animals, Birds, Chordates, Nonhuman Vertebrates, Vertebrates

ORGN Classifier
Muridae 86375
Super Taxa
Rodentia; Mammalia; Vertebrata; Chordata; Animalia
Taxa Notes
Animals, Chordates, Mammals, Nonhuman Vertebrates, Nonhuman Mammals, Rodents, Vertebrates

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141349-89-5D (SRC KINASES)
80449-02-1 (TYROSINE KINASE)
60-18-4Q (TYROSINE)
556-03-6Q (TYROSINE)
87588-23-6D (SRC KINASES)

ANSWER 5 OF 9 MEDLINE on STN

AN 97027884 MEDLINE

DN PubMed ID: 8873971

TI Nitric oxide synthase 1 and nitric oxide synthase 3 protein expression is regionally and temporally regulated in fetal brain.

AU Northington F J; Koehler R C; Traystman R J; Martin L J

CS Department of Pediatrics, Johns Hopkins Medical Institutions, Baltimore, MD 21287, USA.. fnorthin@welchlink.welch.jhu.edu

NC AG 07914 (NIA)
K08-1742-01
P01-20020

SO Brain research. Developmental brain research, (1996 Aug 20) Vol. 95, No. 1, pp. 1-14.
Journal code: 8908639. ISSN: 0165-3806.

CY Netherlands

DT Journal; Article; (JOURNAL ARTICLE)
(RESEARCH SUPPORT, NON-U.S. GOV'T)
(RESEARCH SUPPORT, U.S. GOV'T, P.H.S.)

LA English

FS Priority Journals

EM 199701

ED Entered STN: 28 Jan 1997
Last Updated on STN: 28 Jan 1997
Entered Medline: 14 Jan 1997

AB Two constitutively expressed isoforms of nitric oxide synthase (NOS) have been identified, Nos1 and Nos3. Nos1 was originally identified in neuronal cells and Nos3 in endothelial cells. Because the biochemical activity of NOS is developmentally regulated, we tested the hypothesis that protein expression is also developmentally regulated.
Antibodies to Nos1 and Nos3 were evaluated for specificity by immunoblotting and then used for immunohistochemistry. In fetal and adult sheep brain homogenates, Nos1 antibodies identified one immunoreactive band of proteins at 155 kDa. The Nos3 antibody detected one immunoreactive band at 145 kDa that comigrated with a reactive band in endothelial cell lystates.
Immunoblots of developing neocortex demonstrated that Nos1 was enriched at early gestational ages, whereas Nos3 expression was relatively constant throughout development. By immunohistochemistry, distinct isoform-specific patterns of immunoreactivity were detected. At 60 days, Nos1 immunoreactivity is primarily localized in neuropil, but by midgestation, nonpyramidal neurons are labeled in the cortical plate. Developing neurites are Nos1-positive at 60 and 71 days, decreasing in abundance by 93 days. By 93 days the striatum is fully populated by Nos1-expressing nonprincipal neurons. In hippocampus and subthalamic nucleus, Nos1 immunoreactivity is greatest at 60 and 71 days gestation, decreasing thereafter. Immunoreactivity for Nos3 delineates cerebrovasculature maturation from a primarily radial to a highly complex branching arrangement. Hindbrain structures achieve mature organization of the cerebrovasculature before forebrain. We conclude that constitutive NOS protein expression is developmentally regulated and that distinct isoforms of NOS are regulated differentially during brain development. Expression of Nos3 parallels maturation of the cerebrovasculature, whereas the transient, region- and cell type-dependent enrichment of Nos1 in the developing brain may indicate a temporally and spatially restricted role for this enzyme in the maturation of specific neuronal populations.

CT Check Tags: Female
Animals
Blotting, Western
Brain: AH, anatomy & histology
*Brain: EM, embryology
*Brain: EN, enzymology
Electrophoresis, Polyacrylamide Gel
Immunohistochemistry
*Isoenzymes: BI, biosynthesis

*Nitric Oxide Synthase: BI, biosynthesis
Pregnancy
Sheep
Time Factors
CN 0 (Isoenzymes); EC 1.14.13.39 (Nitric Oxide Synthase)

ANSWER 4 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1996:592340 CAPLUS
DN 125:266537
ED Entered STN: 04 Oct 1996
TI Bradykinin-stimulated protein tyrosine phosphorylation promotes endothelial nitric oxide synthase translocations to the cytoskeleton
AU Venema, Virginia; Marrero, Mario B.; Venema, Richard C.
CS Vascular Biology Center, Dep. Pediatrics, Dep. Pharmacology, Toxicology, Med. Coll. Georgia, Augusta, GA, 30912, USA
SO Biochemical and Biophysical Research Communications (1996), 226(3), 703-710
CODEN: BBRCA9; ISSN: 0006-291X
PB Academic
DT Journal
LA English
CC 2-10 (Mammalian Hormones)
AB Stimulation of bovine aortic endothelial cells (BAEC) with bradykinin produces cycles of tyrosine phosphorylation/dephosphorylation of a 90 kDa endothelial nitric oxide synthase (eNOS)-associated protein which we have termed ENAP-1 (for endothelial nitric oxide synthase-associated protein 1). ENAP-1 interacts specifically and tightly with eNOS in BAEC and is co-immunopptd. from cell lystates with anti-eNOS antibodies. In addition, anti-phosphotyrosine antibodies co-precipitate eNOS. Bradykinin-stimulated tyrosine phosphorylation of ENAP-1 is blocked by the tyrosine kinase inhibitor, tyrphostin. Dephosphorylation is blocked by the tyrosine phosphatase inhibitor, orthovanadate. Treatment of BAEC with bradykinin or the tyrosine phosphatase inhibitor phenylarsine oxide promotes tyrosine phosphorylation of detergent-insol., cytoskeletal proteins accompanied by translocation of eNOS to the cytoskeletal subcellular compartment. Translocation is blocked by the tyrosine kinase inhibitor, geldanamycin and does not appear to alter enzyme catalytic activity. Tyrosine phosphorylation-dependent association of eNOS with the cytoskeleton may have a role in targeting NO production to specific subcellular locations.
ST bradykinin endothelium nitric oxide synthase translocation
IT Phosphoproteins
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(ENAP-1 (endothelial nitric oxide synthase-associated protein 1); bradykinin-stimulated protein tyrosine phosphorylation promotes endothelial nitric oxide synthase translocations to cytoskeleton of bovine aortic endothelial cells)
IT Cytoskeleton
Phosphorylation, biological
Signal transduction, biological
(bradykinin-stimulated protein tyrosine phosphorylation promotes endothelial nitric oxide synthase translocations to cytoskeleton of bovine aortic endothelial cells)
IT Phosphorylation, biological
(-dephosphorylation, bradykinin-stimulated protein tyrosine phosphorylation promotes endothelial nitric oxide synthase translocations to cytoskeleton of bovine aortic endothelial cells)
IT Dephosphorylation, biological
(-phosphorylation, bradykinin-stimulated protein tyrosine phosphorylation promotes endothelial nitric oxide synthase translocations to cytoskeleton of bovine aortic endothelial cells)
IT Artery
(aorta, endothelium, bradykinin-stimulated protein tyrosine phosphorylation promotes endothelial nitric oxide synthase translocations to cytoskeleton of bovine aortic endothelial cells)
IT Biological transport
(translocation, bradykinin-stimulated protein tyrosine phosphorylation

promotes endothelial nitric oxide synthase translocations to cytoskeleton of bovine aortic endothelial cells)

IT 125978-95-2, Nitric oxide synthase
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(bradykinin-stimulated protein tyrosine phosphorylation promotes endothelial nitric oxide synthase translocations to cytoskeleton of bovine aortic endothelial cells)

IT 58-82-2, Bradykinin
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(bradykinin-stimulated protein tyrosine phosphorylation promotes endothelial nitric oxide synthase translocations to cytoskeleton of bovine aortic endothelial cells)

IT 60-18-4, L-Tyrosine, biological studies 79747-53-8, Tyrosine phosphatase 80449-02-1, Tyrosine kinase
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(bradykinin-stimulated protein tyrosine phosphorylation promotes endothelial nitric oxide synthase translocations to cytoskeleton of bovine aortic endothelial cells)